DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009875 Address: 333 Burma Road **Date Inspected:** 31-Oct-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

OBG & TOWER Components **Bridge No:** 34-0006 **Component:**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 1

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 010 located on Counter Weight CW002A – PP096. Welder is identified as 059450. ZPMC QC is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2133.

FCAW process welding of weld joint # 004 located on Counter Weight CW002A – PP104. Welder is identified as 059450. ZPMC QC is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

BAY 2

This QA Inspector observed the following work in progress:

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FCAW process welding of weld joint # 055 located on FB3039 – 001. Welder is identified as 062438. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2132-3.

FCAW process welding of weld joint # 058 located on FB3097 – 001. Welder is identified as 048443. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2232 - B - U2 - F.

FCAW process welding of weld joint # 091 located on FB3039 – 001. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2232 - B - U2 - F.

BAY 5

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004517 Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1.10TR1 008 004
- 2.10TR2 009 004
- 3.10TR2 010 004
- 4. 10TR2 012 004
- 5.10TR2 013 004
- 6. 10TR2 014 004
- 7. 10TR2 015 004
- 8. 10TR2 011 004
- 9. 10TR2 018 004

Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. 10TR1 007 003
- 2.10TR1 015 004
- 3.10TR1 016 004
- 4. 10TR2 004 004
- 5.10TR2 003 004
- 6. 10TR2 005 004
- 7. 10TR2 006 004
- 8. 10TR2 007 004
- 9. 10TR2 008 004

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This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 010 located on Traveler Rail 10TR2 – 001. Welder is identified as 215078. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U5 - F.

FCAW process welding of weld joint # 010 located on Traveler Rail 10TR2 – 016. Welder is identified as 215185. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U5 - F.

FCAW process welding of weld joint # 009 located on Traveler Rail 11TR3 – 010. Welder is identified as 217185. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

FCAW process welding of weld joint # 014 located on Traveler Rail 10TR1 – 020. Welder is identified as 205390. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U5 - F.

BAY 6

Tower

This QA Inspector observed the following work in progress:

SMAW process repair welding of weld joint #7B located on Tower Strut WD1 – A305 – 53M – 3. Welder is identified as 048617. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -485 - SMAW - 2G(2F) - FCM - Repair - 1.

SMAW process repair welding of weld joint #1B located on Tower Strut WD1 - A305 - 77M - 3. Welder is identified as 067707. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -485 - SMAW - 2G(2F) - FCM - Repair - 1.

SMAW process repair welding of weld joint #9B located on Tower Strut WD1 – A305 – 77M – 3. Welder is identified as 048617. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – 345 – SMAW – 2G (2F) – FCM – Repair.

SMAW process repair welding of weld joint #2A located on Tower Strut WD1 - A305 - 65M - 3. Welder is identified as 053753. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -485 - SMAW - 2G(2F) - FCM - Repair - 1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer